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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

WEST, JEFFREY R

ART UNIT

PAPER NUMBER

2857

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Please find below and/or attached an Office communication concerning this application or proceeding.



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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

## **DETAILED ACTION**

### ***Response to Amendment***

1. The reply filed on 24 November 2004 is not fully responsive to the prior Office Action because of the following omission(s) or matter(s):

Applicant has not sufficiently responded to the following rejections/objections presented in the Office Action mailed August 24, 2004:

The drawings in Figures 3-6 are objected to because they do not have sufficiently descriptive labels. Blank boxes in drawings should be labeled descriptively unless it is a well-known component.

Specifically, in Figures 3-6, blank boxes "8" should be labeled "signal generator" and blank boxes "13" should be labeled "microcontroller instrument".

Claim 2 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement because it recites, "conditioning and normalizing the sensor information based on parameters and environmental condition of the conduit" and "processing the normalized information to provide an output signal indicative of the condition and an estimate of remaining useful life". The specification, however, does not describe this aspect of the invention and therefore one having ordinary skill in the art would not understand how the sensor information is normalized and with respect to what the information is normalized.

Claims 37 and 41 are rejected as not being sufficiently enabled by the specification because they include limitations for specifying that "the material" is comprised of "ceramic" and "a concretion". These limitations, however, are not described in the specification and therefore one having ordinary skill in the art would not be enabled to use the particular aspects in carrying out the invention.

Claim 1, lines 4-6, recite "each local monitoring device having: a central processor . . ." This limitation is considered to be vague and indefinite because it is unclear to one having ordinary skill in the art how a local monitoring device can have a central processor. It is suggested that in lines 4-5 Applicant delete "each local monitoring device having".

Claim 18 is rejected as being vague and indefinite because it further limits "The apparatus of claim 2". Claim 2 is a "monitoring device" that includes a plurality of apparatuses including sensors and microcontrollers. Therefore, it is unclear to which apparatus "The apparatus" further limits.

Claim 19, line 3 is considered to be vague and indefinite because it includes a limitation for "the branches" without a previous mention of any "branches". Therefore it is unclear to one having ordinary skill in the art as to what "the branches" refers.

Claim 19, line 5 is considered to be vague and indefinite because it recites "but not limited to". This recitation does not receive any patentable weight because it is

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not an actual limitation. Since this recitation does not provide a limitation, it is suggested that "but not limited to" be deleted or changed to ---at least one of---.

Claim 20 is rejected under 35 U.S.C. 112, second paragraph, because of multiple dependency since it depends on both claims 2 and 43.

Claim 20 is considered to be vague and indefinite because it recites "the signal generators", "the signal detectors" and "the insulation material" without a previous mention of any "signal generators", "signal detectors", or "insulation material". Therefore it is unclear to one having ordinary skill in the art as to what "the signal generators", "the signal detectors" and "the insulation material" refer.

Claim 22, line 2 is considered to be vague and indefinite because it includes a limitation for "the insulation material" without a previous mention of any "insulation material". Therefore it is unclear to one having ordinary skill in the art as to what "the insulation material" refers.

Claim 24, line 2 is considered to be vague and indefinite because it includes a limitation for "the insulation" without a previous mention of any "insulation". Therefore it is unclear to one having ordinary skill in the art as to what "the insulation" refers.

Claim 25, line 2 is considered to be vague and indefinite because it includes a limitation for "the insulation" without a previous mention of any "insulation". Therefore it is unclear to one having ordinary skill in the art as to what "the insulation" refers.

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Claims 36-41 are considered to be vague and indefinite because they further limit "the material" to a particular type while parent claim 2 does not contain any limitation for a "material". Therefore it is unclear to one having ordinary skill in the art as to what "the material" refers.

Several lines of claim 42 are considered to be vague and indefinite for lacking antecedent basis. These sections include "the requirements" (line 3), "the system" (line 3), "the functions" (line 4), "the distributed computers" (line 4), "the parameters" (line 6), "the components" (line 7), "the readings" (line 31), "the remaining useful life" (line 38), "the position" (line 63), and "the response" (line 65).

Claim 42 is considered to be vague and indefinite because line 20 recites "comprising the steps of" but it is unclear to what the steps refer. It is assumed that these steps refer back to the determination step and therefore "comprising" should be ---the determining comprising---

Applicant is also reminded the requirement to respond to each of the objections to the specification and claims.

The proposed amendments to the specification filed November 24, 2004, are not compliant with 37 CFR 1.121. 37 CFR 1.121 requires that a replacement paragraph or section must be a marked-up version showing the changes. 37 CFR 1.121 also specifies that a clean version of any replacement paragraph or section must not be

submitted in addition to a marked-up version, except when Applicant submits a substitute specification.

The proposed amendment to the specification also contains the following informality:

Applicant indicates in the proposed change to page 16 that "On your suggestion I made the change on page 16 lines 8-9 the label 'tape supporting sensitized media' as '17' was incorrect as found by the examiner and has been changed." The corresponding change to the section of the specification, however, still states, "[17] tape supporting sensitized media".

In the remarks filed November 24, 2004, Applicant has indicated that "I have responded to this with additional drawings and discussions of how the claims relate to using measurement of Optical Phenomena. I expanded the explanation with definition of technical terms and example(s) in Preferred Embodiment."

As noted above, 37 CFR 1.121 requires that a replacement paragraph or section must be a marked-up version showing the changes. Applicant is also reminded that matter not in the original specification, claims, or drawings is usually new matter. Depending on circumstances such as the adequacy of the original disclosure, the addition of inherent characteristics such as chemical or physical properties, a new structural formula or a new use may be new matter. See *Ex parte Vander Wal*, 109 USPQ 119, 1956 C.D. 11, 705 O.G. 5 (Bd. App. 1955) (physical properties), *Ex*

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parte Fox, 128 USPQ 157, 1960 C.D. 28, 761 O.G. 906 (Bd. App. 1957) (new formula) and Ex parte Ayers, 108 USPQ 444 (Bd. App. 1955) (new use).

Applicant, is not permitted to add new matter to the specification, claims, and/or drawings that was not in the original specification, claims, and drawings. Applicant should review the proposed amendments to the specification and drawings to insure that no new matter is present before submitting a new marked-up copy of the specification and new set of drawings to be entered.

The proposed amendments to the claims filed November 24, 2004, are not compliant with 37 CFR 1.121. 37 CFR 1.121 requires that deleted text must be shown by strikethrough with two exceptions: for deletion of five or fewer consecutive characters, double brackets [[ ]] may be used, and if strikethrough cannot be easily perceived, deleted text must be shown by double brackets [[ ]] around the deleted text characters.

Applicant has attempted to indicate deleted text using a strikethrough with a single bracket.

37 CFR 1.121 also requires that when there is any amendment to a claim, a claim listing of all claims ever presented in the case must be supplied in ascending numerical order with each claim including a status identifier.

Claims 36-41 and 56 do not contain status identifiers.



Claims 1-16, 18-33, and 42 each contain discrepancies between the claims as originally filed and marked-up as amended.

For example, in claim 1:

In line 3, a discrepancy exists between "integrity monitory device" as currently amended and "integrity monitoring devices", as originally presented.

Bridging lines 3-4, a discrepancy exists between "the status" as currently amended and "the health status", as originally presented.

In line 5, a discrepancy exists between "a central processor" as currently amended and "a centralized data processor", as originally presented.

In line 5, a discrepancy exists between "a plurality of" as currently amended and "the plurality of", as originally presented.

In line 6, a discrepancy exists between "central" as currently amended and "centralized", as originally presented.

In line 6, a discrepancy exists between "rocessor" as currently amended and "processor", as originally presented.

In line 9, a discrepancy exists between "communicating the said" as currently amended and "communicating the set", as originally presented.

Bridging lines 12-13, a discrepancy exists between "a set of" as currently amended and "the set of", as originally presented.

Applicant should review claims 1-16, 18-33, and 42 to insure that the marked-up copy of the claims accurately reflects the changes made by amendment.

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The information disclosure statement filed 24 November 2004 fails to comply with 37 CFR 1.98(a)(1), which requires the following: (1) a list of all patents, publications, applications, or other information submitted for consideration by the Office; (2) U.S. patents and U.S. patent application publications listed in a section separately from citations of other documents; (3) the application number of the application in which the information disclosure statement is being submitted on each page of the list; (4) a column that provides a blank space next to each document to be considered, for the examiner's initials; and (5) a heading that clearly indicates that the list is an information disclosure statement. The information disclosure statement has been placed in the application file, but the information referred to therein has not been considered.

Applicant is requested to submit an unmarked copy of the Information Disclosure Statement with a blank space next to the documents to be considered.

2. See 37 CFR 1.111. Since the above-mentioned reply appears to be *bona fide*, applicant is given **ONE (1) MONTH or THIRTY (30) DAYS** from the mailing date of this notice, whichever is longer, within which to supply the omission or correction in order to avoid abandonment. **EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a).**

3. Any inquiry concerning this communication or earlier communications from the

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examiner should be directed to Jeffrey R. West whose telephone number is (571)272-2226. The examiner can normally be reached on Monday through Friday, 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571)272-2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jrw  
July 8, 2005

  
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